U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA NUMBER: CO-100-2006-048

LEASE/ALLOTMENT NUMBER: 0500069/04178

PROJECT NAME: Ten year renewal of the grazing lease for David K. and Jody A. Owens on the North Moffat Oil Field Allotment #04178.

LEGAL DESCRIPTION: See allotment map, Attachment 1

North Moffat Oil Field Allotment #04178 Por. of SW ¼ Sec. 34, T5N R91W

43 acres- BLM

APPLICANT: David K. and Jody A. Owens

PLAN CONFORMANCE REVIEW: The Proposed Action and Alternatives are subject to the following plan:

Name of Plan: Little Snake Resource Management Plan and Record of Decision

Date Approved: April 26, 1989

Results: The Proposed Action and Alternatives have been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The Proposed Action is consistent with the Little Snake Resource Management Plan, Record of Decision, Livestock Grazing Management objective to improve range conditions for both wildlife and livestock through proper utilization of key forage plants and adjusting livestock stocking rates as a result of vegetation studies.

The North Moffat Oil Field Allotment #04178 is located within the Eastern Yampa River Management Unit (MU 1). The Proposed Action is compatible with the objectives of this unit which are to provide for the development of coal, oil, and gas resources. All lands in MU 1 are open to livestock grazing unless coal development is imminent. In the 1990 Range Program Summary, the North Moffat Oil Field Allotment was classified as a C (Custodial) allotment.

Other Documents:

Federal Land Policy and Management Act of 1976, as amended (FLPMA) (43 USC 1752)

Rangeland Reform Final Environmental Impact Statement. December, 1994.

Standards for Public Land Health and Guidelines for Livestock Grazing in Colorado. February 12, 1997.

NEED FOR PROPOSED ACTION: BLM lease #0500069, which authorizes livestock grazing on the North Moffat Oil Field Allotment #04178 expired on February 28, 2006. This lease was renewed for one year, under existing terms and conditions, pursuant to Sec. 324, PL 108-108, until BLM can complete the renewal in conformance with all applicable laws and regulations. The current expiration date is February 28, 2007. This lease is subject to renewal at the discretion of the Secretary of the Interior, who delegated the authority to BLM, for a period of up to ten years. The BLM has the authority to renew this livestock grazing lease consistent with the provisions of the *Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act,* and Little Snake Field Office's *Resource Management Plan/Environmental Impact Statement.* This Plan/EIS has been amended by *Standards for Public Land Health in the State of Colorado.*

The following Environmental Assessment (EA) will analyze the impacts of livestock grazing on public land managed by the BLM. The analysis will recommend terms and conditions to the lease which will improve or maintain public land health. The Proposed Action will be assessed for meeting land health standards.

In order to graze livestock on public land, the livestock producer (lessee) must hold a grazing lease. The grazing lessee has a preference right to receive the lease if grazing is to continue. The land use plan allows grazing to continue. This EA will be a site specific look to determine if grazing should continue as provided for in the land use plan and to identify the conditions under which it can be renewed.

PUBLIC SCOPING PROCESS: The BLM Little Snake Field Office sent out a Notice of Public Scoping on October 13, 2004 to determine the level of public interest, concern, and resource conditions on the grazing allotments that were up for renewal in FY 2006. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on grazing permit and lease renewals. Individual letters were sent to the affected permittees and lessees informing them that their permit and/or lease was up for renewal and requesting any information they wanted included or taken into consideration during the renewal process. The issuance of a grazing lease is being carefully analyzed within the scope of the specific action being taken, resources issues or concerns, and public input received.

BACKGROUND: The North Moffat Oil Field Allotment #04178 is located approximately two miles south of Hamilton, Colorado. Elevations range from approximately 6,800 feet in the northern portion of the allotment to approximately 7,200 feet in the southern portion. This small

allotment is located on a hillside with a generally westerly aspect. Plant communities are primarily sagebrush-grass on lower slopes and mountain shrub and Gambel oak dominating the higher slopes. This allotment is entirely public land, however the private base property is located immediately west and is generally grazed in common with the allotment. Historically, this allotment has been used by sheep.

No monitoring data has been collected on this allotment in recent years. A field visit to the allotment to assess land health in 2005 revealed an abundance of cheatgrass within the sagebrush-grass communities and some areas of houndstongue. It appears that the allotment has undergone many years of heavy grazing by sheep. A more detailed account on the findings of the land health assessment will be given later in this EA.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action

Renew the grazing lease on the North Moffat Oil Field Allotment #04178 for ten years. This renewal would include a change in class of livestock from sheep to cattle. Season of use, AUMs, and all other terms and conditions would remain the same. The lease would be renewed as follows:

From:

Allotment Name and #	Livestock # and Kind	Grazing Period Begin	End	%PL	AUMs
North Moffat Oil Field #04178	5 Sheep	05/15	09/14	100	4

To:

Allotment Name and #	Livestock # and Kind	Grazing Period Begin	End	%PL	AUMs
North Moffat Oil Field #04178	1 Cattle	05/15	09/14	100	4

Although the proposed lease is for one cow, expected use would involve small numbers of cattle drifting back and forth from the adjacent private land at various times during the grazing season.

No Special Terms and Conditions would apply.

This lease would be subject to the Standard and Common Terms and Conditions (see Attachment 2).

No Action Alternative

This alternative would maintain the existing lease. Class of livestock would continue to be

sheep.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED

No grazing alternative
No livestock grazing would take place under this alternative. This alternative was eliminated from detailed study because it was not a realistic, implementable alternative, nor did it meet the requriements of the Federal Land Policy and Management Act of 1976. When the RMP was approved, it was determined that livestock grazing was an appropriate use of this land. Eliminating livestock grazing is not analyzed because no new issues or concerns have been identified that would require this action.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: Air quality in the vicinity currently meets all applicable state and federal standards.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/14/06

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Jim McBrayer 3/6/06

CULTURAL RESOURCES

Affected Environment: The final E.I.S. for Rangeland Reform '94 notice published in the Federal Register, December 30, 1994 and guidance from the BLM Washington and BLM Colorado State Office's established requirements for permit renewal analyses.
Data developed here, as well as in the allotment specific analysis, was taken from the cultural program project report files, site report files, and base maps kept at the Little Snake Field Office as well as from An Overview of Prehistoric Cultural Resources Little Snake Resource Area, Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, and An Isolated Empire, A History of Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and Appendix 21 of the Little Snake Resource Management Plan and Environmental Impact Statement, Draft February 1986, Bureau of Land Management, Craig, Colorado District, Little Snake Resource Area. Other data sets may be used for the GIS maps developed from the Little Snake Field Office Geographic Information System (GIS) as that data is developed in future studies.

The GIS maps will be developed using USGS and BLM data that show the springs, creeks and rivers, intermittent drainage, riparian areas, and slopes greater than 30 percent. The BLM data that reflects water features potentially present in the project areas is incomplete at this time. This data represents the "best available data" that the BLM office currently has developed at this time. These maps, as well as the cultural programs current understanding of prehistoric settlement and subsistence patterns, as reflected in the archaeological record, will be used to guide initial survey efforts to locate past human activity areas in each allotment. These areas will be evaluated for potential livestock concentration impacts. The effort to identify and evaluate cultural resources in association with livestock concentration areas will take place during upcoming field seasons.

The table below is based on the allotment specific analysis developed for allotment #04178 in this environmental assessment. The table shows cultural resources, eligible and need data, and those that are anticipated to be in each allotment. This allotment has had a complete Class III cultural resource survey completed for it,

Metcalf, Michael D.
1985 An Archaeological Inventory of the Texaco Moffat Prospect near Hamilton, Moffat County, Colorado. Metcalf-Zier Archaeologist, Inc., Eagle, Colorado.

Allotment Number	**Acres Surveyed at a Class III Level [1] [2]**	**Acres NOT Surveyed at a Class III Level**	**Percent -%- Of Allotment Inventoried at a Class III Level**	**Eligible or Need Data Sites – Known in Allotment (Site Numbers)**	**Estimated Sites for the Allotment** ** (Total Number)**	**Estimated Eligible or Need Data Sites in the Allotment (Number)**
04178	43[2]	None	100%	n/a	n/a	n/a

(Note: *****Acres are derived from GIS allotment maps. 1. BLM only acres or 2. BLM and other acres in the allotment. See allotment specific analysis form. **Estimates of site densities are

based on known inventory data. Estimates represent a minimum figure which may be revised upwards based on future inventory findings.)

Environmental Consequences, all alternatives: Monitoring of the previous years range permit renewal environmental documents, FY98, FY99, FY2000, FY01, FY02, FY03, FY04, and FY05 has been carried out for some of the known eligible and need data sites identified in the cultural records review. These reports represent three field seasons of evaluation work on the eligible and need data sites. The fieldwork conducted during 2000, 2001, 2002, 2003, and 2005 identified impacts to some of the cultural resources being evaluated. This information is covered in the following reports:

Keesling, Henry S. and Gary D. Collins, Patrick C. Walker
2000 Cultural Resource Evaluation of Known Eligible and Need Data Sites within Range Allotments for Range Permit Renewal EA's FY98 and FY99. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

Collins, Gary D., and Patrick C. Walker, Sam R. Johnson, Henry S. Keesling
2001 Addendum to Cultural Resource Evaluation of Known Eligible and Need Data Sites within Range Allotments for Range Permit Renewal EAs FY98 and FY99, Range Permit Renewal EA's FY2000 and FY2001. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

Collins, Gary D. and Ryan J. Nordstrom, Henry S. Keesling
2002 The Second Addendum to The Cultural and Need Data Sites Within Range Allotments for Range Permit Renewal EA's FY98, FY99, FY00. FY01, and FY02. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

Collins, Gary D. and Henry S. Keesling
2003 The Third Addendum to The Cultural and Need Data Sites Within Range Allotments for Range Permit Renewals EA's FY98, FY99. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

Collins, Gary D. and Henry S. Keesling
2005 The Fourth Addendum Range Permit Renewal FY04 and FY05 to The Cultural Resource Evaluation of Known Eligible and need Data Sites Within Range Allotments for Range Permit Renewal EA's FY00, FY01, FY02, FY03. BLM 10.27.05. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy of file at that office.

BLM has committed to a ten year phased evaluation being conducted for cultural resources that takes into account identified livestock concentration areas and the cultural resources that are either eligible and/or need data and to carrying out mitigation on cultural resources that require this action. The phased monitor and mitigation approach will mitigate identified adverse effects, significant impacts and data loss, (NHPA Section 106, 36CFR800.9; Archaeological Resource

Protection Act 1979; BLM/Colorado SHPO Protocol 1998; NEPA/FLPMA requirements) to an acceptable level for known eligible and need data cultural resources.

The GIS mapping and evaluation effort will establish areas that have potential conflicts between livestock and prehistoric cultural resources. The GIS maps will provide a computer generated visual departure point for the proposed cultural fieldwork. GIS maps using USGS and BLM best available data, will be created showing springs, stream course features, riparian areas, and slopes that are greater than 30% slope within the allotment. Current understanding of prehistoric settlement and subsistence patterns will be applied to the GIS map review and used to establish prehistoric cultural areas. These potential livestock concentration areas will be evaluated in the field.

Livestock impacts may cause cumulative effects, some of which will be significant, and will cause long-term, irreversible, potentially irretrievable adverse impacts and data loss. However, the phased identification and evaluation fieldwork will identify mitigation measures that will reduce these impacts (NHPA Section 106; 36CFR800.9; Archaeological Resource Protection Act 1979; BLM/Colorado SHPO Protocol 1998; NEPA/FLPMA requirements), to an acceptable level.

Other project specific Class III surveys initiated by the BLM, industry, or ranching will identify previously unrecorded cultural resources within these allotments. These cultural resources will be incorporated into current and/or future range permit renewal Section 106 review efforts.

Mitigative Measures: Standard Stipulations for cultural resources are included in Standard Terms and Conditions for the grazing permit (Attachment 2).

1. GIS maps based upon stream course features and springs from the 7.5 minute USGS maps and BLM best available riparian/spring data in this office will be used to initially establish evaluation areas for livestock concentrations. Current archaeological understanding of settlement and subsistence patterns for prehistoric cultural resources will be applied to these maps. Identified livestock concentration areas will be field evaluated. Those areas with no livestock impacts but with potential for cultural resources will under go the same Class III survey discussed below. This survey will be conducted documenting archaeological resources which may be impacted if grazing practices change in the future. Identified concentration areas that exhibit livestock impacts will have the following cultural surveys:

> Springs, riparian areas, streams or creeks, and intermittent drainage will have a Class III survey in the area of concentration that includes an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.
>
> Springs will have a Class III survey in the area of concentration and include an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

2. GIS maps showing slope potential, 30% or greater, where rock art and rock shelters are predicted to occur, will be used to initially establish evaluation areas for Class III survey. These areas will be evaluated for livestock concentrations. Identified concentration areas will have the following cultural surveys performed:

> Potential rock shelters, rock art areas will be evaluated to see if cultural materials are present. When cultural resources are identified the site will be recorded and appropriate mitigation will be developed.

3. Previously identified sites, table above, and new sites recorded and evaluated as eligible and/or need data during other project specific Class III survey will need to be evaluated and monitored too. Initial recording of new sites and re-evaluation of the known sites will establish current condition of the resource and help in developing a monitoring plan for all sites. Some sites will have to be monitored more often than others. Sites that are impacted by grazing activities will need further monitoring, physical protection or other mitigative measures developed.

4. Site monitoring plans, other mitigation plans, will be developed and provided to the Colorado State Historic Preservation Officer in accordance with the Protocol (1998) and subsequent programmatic agreements regarding grazing permit renewals.

Conducting Class III survey(s), monitoring, and developing site specific mitigation measures will mitigate the adverse effects, data loss, and significant impacts (NHPA Section 106, 36CFR800.9; Archaeological Resource Protection Act 1979; BLM Colorado and Colorado SHPO Protocol 1998; and NEPA/FLPMA requirements) to an acceptable level.

The Colorado State Historic Preservation Officer (SHPO) agreed with the Bureau of Land Management, Colorado, (BLM) that the BLM could issue its Range Renewal Permits with the proposed Cultural Resource Management actions, monitoring known eligible and need data sites and conducting Class III and/or modified Class III surveys on selected areas of BLM lands within in a ten year time frame (Cultural Matrix Team Meeting 26 January 1999, Colorado BLM State Office).

The Little Snake Field Office will initiate the monitoring of known eligible and need data sites the first field season following the issuing of the permit if possible. This survey will be based upon an accepted, BLM and SHPO, research design that will establish criteria for evaluation of the sites for livestock impacts and any needed mitigation and future monitoring needs.

Name of specialist and date: Henry S. Keesling 3/8/06

ENVIRONMENTAL JUSTICE

Affected Environment: The allotment is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts from the project. There are no Native American, minority, or low-income populations whose social, cultural, or economic

well being would be affected by the Proposed Action or alternatives.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Louise McMinn 3/2/06

FLOOD PLAINS

Affected Environment: No flood plains are present on public lands within this allotment.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/14/06

INVASIVE, NONNATIVE SPECIES

Affected Environment: Houndstongue, cheatgrass and yellow allysum occur on this allotment. Whitetop, black henbane, Canada thistle, and other biennial thistles occur in this area but have not been documented on this allotment. There is the potential for noxious weeds, such as dalmatian toadflax, knapweeds, and others, to exist and spread onto the allotment.

Environmental Consequences, all alternatives: Vehicular access to public land for grazing operations, livestock and wildlife movement, as well as wind and water can cause invasive species to spread into new areas. Surface disturbing activities associated with livestock concentration can increase weed presence, but there are no water sources or other features that would encourage such concentrations on this allotment.

The use of best management practices and mitigation of livestock disturbance would facilitate control of invasive species and reduce the potential of long term infestation of annual and noxious weed species. All principles of Integrated Pest Management would be employed to control noxious weeds on public lands.

Mitigative Measures: None

Name of specialist and date: Curtis Bryan 3/6/06

MIGRATORY BIRDS

Affected Environment: The North Moffat Oilfield Allotment has potential golden eagle nesting habitat, however, there are no known golden eagle nests within this allotment.

Environmental Consequences, all alternatives: Continuing grazing use by either sheep or cattle at the current stocking rate would have no impact on golden eagles. There is very little chance of take of golden eagles to occur.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 3/7/06

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Utes Tribal Council, and the Colorado Commission of Indian Affairs on 11 January 2006. The letter discussed the range permits that the BLM would be working on in FY06/FY07. Comments received from the Tribal Council's did not foresee any impacts. No other comments were received (Letters on file at the Little Snake Field Office, Craig, Colorado).

Name of specialist and date: Henry S. Keesling 3/7/06

PRIME & UNIQUE FARMLANDS

Affected Environment: Not present.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/14/06

T&E SPECIES - SENSITIVE PLANTS

Affected Environment: There are no BLM sensitive plant species on the North Moffat Oil Field Allotment #04178.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 2/27/06

T&E SPECIES – ANIMALS

Affected Environment: There are no threatened or endangered species or habitat for such species in or near this grazing allotment.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 3/7/06

T&E SPECIES – PLANTS

Affected Environment: There are no federally listed threatened or endangered plant species on the North Moffat Oil Field Allotment #04178.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 2/27/06

WASTES, HAZARDOUS OR SOLID

Affected Environment: There is no solid or hazardous waste present on the allotment.

Environmental Consequences, all alternatives: Access to the grazing allotment for livestock management purposes could result in releases of motorized vehicle fluids such as oil and coolant. This type of release is unlikely and would be extremely limited in nature.

Mitigative Measures: None

Name of specialist and date: Duane Johnson 3/1/06

WATER QUALITY - GROUND

Affected Environment: There is low potential for this area to contain ground water aquifers. The ground water quality in the areas range from marginally useable to poor.

Environmental Consequences, all alternatives: Due to the limited number of livestock grazing and the small amount of acreage involved, there would be no adverse impacts to ground water quality within the allotment. The Proposed Action and alternatives would be conducted in accordance with existing Colorado laws for water quality. Specifically, all grazing activities would comply with the applicable water quality regulations in The Colorado Water Quality Control Act and they would be in conformance with the classifications and numeric standards for water quality established by the Colorado Water Quality Control Commission.

Mitigative Measures: None

Name of specialist and date: Fred Conrath 3/8/06

WATER QUALITY - SURFACE

Affected Environment: Surface water runoff from the public lands flow towards an unnamed intermittent tributary of Morapos Creek. Morapos Creek needs to have sufficient water quality to support Aquatic Life Cold 1, Recreation 2 and Agriculture. Morapos Creek at its tributaries are currently supporting these classified uses.

Environmental Consequences, all alternatives: Water quality would not be adversely impacted in Morapos Creek and its tributaries.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/15/06

WETLANDS/RIPARIAN ZONES

Affected Environment: There are no wetlands or riparian zones within this grazing allotment.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 3/7/06

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Jim McBrayer 3/6/06

WILDERNESS, WSAs

Affected Environment: Not present.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Jim McBrayer 3/6/06

NON-CRITICAL ELEMENTS

SOILS

Affected Environment: The soils within this allotment are the Torriorthents-Rock outcrop, sandstone complex, 25 to 75% slopes (TR) and the Bulkley-Quilt, complex 12 to 45% slopes (BQ). The Bulkley-Quilt complex has deep soil profiles beginning with loam surface soils and clay loam subsoils whereas the Torriorthents have typically shallow soil depths primarily of sandy loams. Other important soil properties include a very high runoff rate for both soil mapping units, moderate (TR) to very slow (BQ) permeability and moderate (BQ) to very low (TR) water holding capacity. Small thin plates of sandstone are found throughout the soil profiles. Although Mancos Shale is present in this area and provided parent materials for some of the soils, these soil mapping units are reported to be nonsaline and nonsodic. The Bulkley soil developed from alluvium and residuum derived from shale. The Quilt soil developed from colluvium and residuum derived from interbedded shale and sandstone. The Torriorthents soil developed from residuum and colluvium derived from sandstone and shale.

There is substantial historic surface disturbance from access roads and/or pipelines to oil and gas well pads in the southern portion of this allotment. This disturbance may have initiated the conditions for cheatgrass to become established. If soil compaction resulted from this disturbance and subsequent reclamation activities did not alleviate and/or compounded this compaction then it may help to explain why large areas of cheatgrass are present. In any event the Bulkley-Quilt soil is susceptible to compaction.

Environmental Consequences, Proposed Action: A change in class of livestock from sheep to cattle may concentrate livestock use to the lesser slopes within the allotment and on the soils mapped as Bulkley-Quilt, complex 12 to 45% slopes. The steeper slopes within this soil mapping unit are not likely to receive much grazing pressure, whereas the lesser slopes of the Torriorthents-Rock outcrop, sandstone complex, 25 to 75% slopes would likely be used where these areas would be accessible by moderate slopes. Proper grazing use guidelines of 50% utilization on key forage species would prevent concentrated use by cattle and no substantial changes to soil properties would be expected.

The potential for soil compaction exists when soils are moist. Although this condition can occur anytime during the grazing period with extended precipitation it would occur more consistently before and after the grazing period.

Environmental Consequences, No Action: Continued sheep use on the North Moffat Oil Field Allotment would allow for better grazing distribution onto the steeper slopes of the allotment.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/15/06

VEGETATION

Affected Environment: This allotment contains sagebrush-grass, Gambel oak, and mountain shrub plant communities. Dominant species include basin big sagebrush (*Artemisia tridentata tridentata*), cudweed sagewort (*A. gnaphalodes*), green rabbitbrush (*Chrysothamnus viscidiflorus*), rubber rabbitbrush (*C. nauseosus*), broom snakeweed (*Gutierrezia sarothrae*), Gambel oak (*Quercus gambelii*), snowberry (*Symphoricarpos albus*), serviceberry (*Amelanchier alnifolia*), arrowleaf balsamroot (*Balsamorrhiza sagitatta*), *Lupinus* spp., *Astragalus* spp., yarrow (*Achillea millefolium*), scarlet globemallow (*Sphaeralcea coccinea*), Kentucky bluegrass (*Poa pratensis*), western wheatgrass (*Agropyron smithii*), needle-and-thread (*Stipa comata*), squirreltail (*Sitanion hystrix*), Indian ricegrass (*Oryzopsis hymenoides*), and basin wildrye (*Elymus cinereus*). Invasive non-natives present include cheatgrass (*Bromus tectorum*) and houndstongue (*Cynoglossum officinale*). Cheatgrass is most abundant at the southern end of the allotment adjacent to an access road for oil well development. Its decrease, as well as a marked increase in native plant diversity, is apparent throughout the rest of the allotment.

Environmental Consequences, Proposed Action: Overall impacts to plant communities on this allotment would be extremely limited due to the steepness of topography present throughout the majority of the allotment. While the change to the lease involves one cow, the typical use would be more like a small number of cattle drifting back and forth from adjacent private land at various times during the grazing season. Season-long availablity of this allotment to cattle would result in an increase of use to the grass component of the plant community. Over the long-term, this can result in an increase in the shrub component of the plant community, but the light use that is expected would result in negligible increases in shrubs. The cheatgrass that is present on the allotment provides good early-season forage prior to seed set (mid May through early to mid June). Cattle use under the current stocking rate would not result in an excessive use of grasses and forbs that would lead to their decline and encourage further spread of cheatgrass. At the current stocking rate of 10.5 acres/AUM, the change in class of livestock from sheep to cattle would not adversely impact the plant community.

Environmental Consequences, No Action: By allowing the continuation of sheep use on this allotment, no negative impacts to the plant communities are expected. Sheep typically favor shrubs and forbs over grasses throughout much of the grazing season, but grasses are utilized as well. Since sheep have a greater ability to access steeper slopes, greater distribution of forage use would occur under this alternative.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 3/1/06

WILDLIFE, AQUATIC

Affected Environment: There is no aquatic wildlife habitat within this grazing allotment.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 3/7/06

WILDLIFE, TERRESTRIAL

Affected Environment: The North Moffat Oilfield Allotment provides year round habitat for mule deer and elk including severe winter range for both species. Red tailed hawks are known to nest within this allotment. A variety of small mammals and reptiles are also found within this allotment.

Environmental Consequences, Proposed Action: The proposed change of livestock from sheep to cattle would not have any negative impact on wildlife habitat within this allotment. The conversion of sheep use to cattle should have a positive benefit to winter range vegetation due to decreased use of sagebrush and other winter forage species that would occur under sheep grazing.

Environmental Consequences, No Action: Continued use by sheep would not negatively impact wildlife habitat on this allotment. Habitat quality is currently acceptable for wildlife and continued management under the present use would not change this.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 3/7/06

OTHER NON-CRITICAL ELEMENTS: For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals		FC 3/8/06	
Forest Management	JHS 3/1/06		
Hydrology/Ground		FC 3/8/06	
Hydrology/Surface		OO 3/15/06	
Paleontology		RE 2/28/06	
Range Management		JHS 2/27/06	
Realty Authorizations		LM 3/2/06	
Recreation/Travel Mgmt		RS 03/02/06	
Socio-Economics		LM 3/2/06	
Solid Minerals		RE 2/28/06	
Visual Resources		JM 3/6/06	

Wild Horse & Burro Mgmt	VD 3/7/06		

CUMULATIVE IMPACTS SUMMARY: This allotment and areas surrounding have historically been grazed by both sheep and cattle. Numerous maintained and unmaintained roads exist throughout the area, including on the allotment. These roads are used regularly by local residents and ranchers as well by as the primary recreation users in the area, hunters. An old oil field exists just south of the allotment, although activity in this field is greatly reduced and this area is not experiencing any new drilling or exploration. Wildlife populations in the area are high, especially for deer and elk who compete with livestock for available forage throughout the area. The primary impacts from all of these activities are most immediately seen in the presence of roads, cultivated land on private lands, and weed presence. The Proposed Action to continue grazing on this allotment and change class of livestock from sheep to cattle is compatible with other uses, both historic and present, and would not add any new or detrimental impacts to those that are already present.

STANDARDS

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: During a site visit in 2005, the BLM determined that the North Moffat Oilfield Allotment was meeting the standard for Native Animal Communities. The proposed renewal of the ten year grazing permit and the change in use from sheep to cattle would not have a negative impact on wildlife habitat. There is some potential for the change of use to result in slight improvements in habitat conditions. These changes are likely to be minor. This standard is currently being met and would continue to be met in the future under either alternative.

Name of specialist and date: Timothy Novotny 3/7/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: There are no threatened, endangered or special status species within this allotment. This standard does not apply.

Name of specialist and date: Timothy Novotny 3/7/06

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: Cattle use on this allotment will target use of grasses over other functional groups within the plant community. Under light to moderate use of the allotment as required by this lease, greater stimulation of native and other desirable grasses would occur, although small increases in shrub abundance could be seen over time. It is expected that cattle use of this allotment would maintain species diversity and keep cheatgrass in check. The Proposed Action would meet this standard.

The No Action Alternative would also meet this standard as this standard is currently being met under permitted sheep grazing.

Name of specialist and date: Hunter Seim 3/1/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)
STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species on the North Moffat Oil Field Allotment #04178. This standard does not apply.

Name of specialist and date: Hunter Seim 2/27/06

RIPARIAN SYSTEMS STANDARD: There are no wetlands or riparian systems within the North Moffat Oil Field Allotment #04178. This standard does not apply.

Name of specialist and date: Timothy Novotny 3/7/06

WATER QUALITY STANDARD: The water quality standard for healthy rangelands would be met with implementation of either the Proposed Action or No Action Alternative. Runoff from snowmelt and summer storms drains from the North Moffat Oil Field Allotment into stream segments that are presently supporting classified uses. No stream segments or tributaries are currently listed as having impaired water quality.

Name of specialist and date: Ole Olsen 3/15/06

UPLAND SOILS STANDARD: The upland soil standard for healthy rangelands would be met with implementation of either the Proposed Action or No Action Alternative. Proper grazing use of the forage resource is required under the terms and conditions of the permit and this level of grazing would maintain sufficient residual forage for upland soil health to be maintained.

Name of specialist and date: Ole Olsen 3/15/06

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office, David Owens.

MITIGATION MEASURES (BLM commitments):

1. GIS maps based upon stream course features and springs from the 7.5 minute USGS maps and BLM best available riparian/spring data in this office will be used to initially establish evaluation areas for livestock concentrations. Current archaeological understanding of settlement and subsistence patterns for prehistoric cultural resources will be applied to these maps. Identified livestock concentration areas will be field evaluated. Those areas with no livestock impacts but with potential for cultural resources will under go the same Class III survey discussed below. This survey will be conducted documenting archaeological resources which may be impacted if grazing practices change in the future. Identified concentration areas that exhibit livestock impacts will have the following cultural surveys:

Springs, riparian areas, streams or creeks, and intermittent drainage will have a Class III survey in the area of concentration that includes an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

Springs will have a Class III survey in the area of concentration and include an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

2. GIS maps showing slope potential, 30% or greater, where rock art and rock shelters are predicted to occur, will be used to initially establish evaluation areas for Class III survey. These areas will be evaluated for livestock concentrations. Identified concentration areas will have the following cultural surveys performed:

Potential rock shelters, rock art areas will be evaluated to see if cultural materials are present. When cultural resources are identified the site will be recorded and appropriate mitigation will be developed.

3. Previously identified sites, table above, and new sites recorded and evaluated as eligible and/or need data during other project specific Class III survey will need to be evaluated and monitored too. Initial recording of new sites and re-evaluation of the known sites will establish current condition of the resource and help in developing a monitoring plan for all sites. Some sites will have to be monitored more often than others. Sites that are impacted by grazing activities will need further monitoring, physical protection or other mitigative measures developed.

4. Site monitoring plans, other mitigation plans, will be developed and provided to the Colorado State Historic Preservation Officer in accordance with the Protocol (1998) and subsequent programmatic agreements regarding grazing permit renewals.

Conducting Class III survey(s), monitoring, and developing site specific mitigation measures will mitigate the adverse effects, data loss, and significant impacts (NHPA Section 106, 36CFR800.9; Archaeological Resource Protection Act 1979; BLM Colorado and Colorado SHPO Protocol 1998; and NEPA/FLPMA requirements) to an acceptable level.

The Colorado State Historic Preservation Officer (SHPO) agreed with the Bureau of Land Management, Colorado, (BLM) that the BLM could issue its Range Renewal Permits with the proposed Cultural Resource Management actions, monitoring known eligible and need data sites and conducting Class III and/or modified Class III surveys on selected areas of BLM lands within in a ten year time frame (Cultural Matrix Team Meeting 26 January 1999, Colorado BLM State Office).

The Little Snake Field Office will initiate the monitoring of known eligible and need data sites the first field season following the issuing of the permit if possible. This survey will be based upon an accepted, BLM and SHPO, research design that will establish criteria for evaluation of the sites for livestock impacts and any needed mitigation and future monitoring needs.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

ATTACHMENTS:

Attachment 1- Allotment Map
Attachment 2- Standard and Common Terms and Conditions

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The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. With the implementation of the attached mitigation measures there is a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are

limited to the Little Snake Resource Area and adjacent land.

2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.

3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.

4. There are no highly controversial effects on the environment.

5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.

6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.

7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED: